

ABSTRACT

A tool for gripping ophthalmic lenses having at least one vacuum gripper, a shaft associated with said vacuum gripper, the shaft having two ends and being slidably attached at one end thereof to a support structure, a resilient member which biases the vacuum gripper in a direction away from said support structure and a locking member which locks the shaft in a desired position during a lens gripping operation.

Another embodiment of the present invention includes a lens hold down mechanism having a support member, at least one shaft slidably connected to said support member, a resilient member which biases said shaft in a downward direction, a lens contact member attached to said shaft and a robotic arm connected to said support member, wherein when said robot moves in a downward direction to pick up a lens tray, said lens contact member will contact lenses in said tray and cause said shaft to move upwardly with respect to said support member, and wherein said resilient member maintains a pressure on said lens in said lens tray.

Another embodiment of the present invention includes an electronic communications scheme having a server, a robotic arm, and a device, wherein said server communicates with said device through a first communications port on said device and wherein said device communicates with said robotic arm through a second communications port.

Another embodiment of the present invention includes an ophthalmic lens manufacturing cell layout having a robotic arm, and a plurality of ophthalmic edging machines, wherein said ophthalmic edging machines have an opening that faces away from said robotic arm.

5 Another embodiment of the present invention includes an arrangement for holding an ophthalmic edging machine within an ophthalmic manufacturing cell having an ophthalmic edging machine, at least two rails, wherein said edging machine includes a bracket that engages said rails, and a locking mechanism, wherein said locking mechanism holds said ophthalmic edgning machine in a desired position along said rails.